

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	(enhancement near3 unit near3 configur\$3) and (enhance near3 circular near3 shadow) and (image near3 enhanc\$3 near3 pixel near3 gradient near3 circular near3 shadow)and (suppressing near3 pixel near3 value near3 gradient near3 image) and (extract\$3 near3 unit near3 configur\$3) and (extract near3 isolat\$3 near3 shadow near3 enhance near3 image) and (disk near shape near3 morphological near3 filter) and (ring near3 shape near3 morphological near3 filter)	US-PGPUB; USPAT	OR	OFF	2008/01/23 12:50
L2	0	(disk near3 shape near3 morphological near3 filter) and (ring near3 shape near3 morphological near3 filter)	US-PGPUB; USPAT	OR	OFF	2008/01/23 12:52
L3	0	(disk near3 morphological near3 filter) and (ring near3 morphological near3 filter)	US-PGPUB; USPAT	OR	OFF	2008/01/23 12:53
L4	0	(disk adj2 morphological adj2 filter) and (ring adj2 morphological adj2 filter)	US-PGPUB; USPAT	OR	OFF	2008/01/23 12:54
S1	2	("4907156").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 13:27
S2	142	("3980885"   "4259582"   "4323973"   "4437161"   "4453266"   "4463375"   "4503461"   "4545068"   "4618990"   "4663773"   "4723553"   "4736439"   "4747156"   "4751643"   "4769850"   "4792900").PN. OR ("4907156").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/08 17:26
S3	195	diagnosis near2 processing near2 image	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:26

## EAST Search History

S4	4	enhacement near2 unit	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:27
S6	342	extract\$3 near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:26
S7	4	S3 and S6	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:29
S8	2	S2 and (diagnosis near2 processing near2 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:26
S9	0	S2 and (enhacement near2 unit)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:27
S10	0	S2 and (circular near2 shadow near2 gradient near2 value)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/08 17:27
S11	1	("2003/0179915").URPN.	USPAT	OR	ON	2007/08/08 17:31
S12	3	("5807256"   "6272244"   "6782071").PN. OR ("7245754"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/08 17:36
S13	14737	circular near2 region	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 13:28

## EAST Search History

S14	165	circular near2 region near2 image	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:15
S15	62	S14 and extract\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:38
S16	25	S15 and enhanc\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 13:34
S17	307	shadow near2 region near2 image	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:16
S18	102	S17 and enhanc\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:38
S19	51	S18 and extract\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:18
S20	10	S19 and (pixel near2 gradient)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:39
S21	1	enhanc\$3 near2 circular near2 shadow near2 region	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:07

## EAST Search History

S23	10	extract\$3 near2 isolat\$3 near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:05
S24	7	circular near2 shadow near2 region	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 13:51
S25	8585	label\$3 near2 region	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:09
S26	391	S25 and (extract\$3 near2 region)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:10
S27	40	S26 and( enhanc\$3 near2 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:14
S28	2325	382/260	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:15
S29	2	S28 and (circular near2 region near2 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:16
S30	13	S28 and (shadow near2 region near2 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:16

## EAST Search History

S31	1038	S28 and enhanc\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:18
S32	448	S31 and extract\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:18
S33	29	S32 and (pixel near2 gradient)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:38
S34	131	tumor near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:38
S35	71	S34 and extract\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:38
S36	23	S35 and enhanc\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:39
S37	2	S36 and (pixel near2 gradient)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/09 14:39
S38	2	circular near2 shadow near2 gradient near2 value	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 12:50

## EAST Search History

S39	2	enhanc\$3 near2 circular near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 13:12
S40	132	tumor near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 13:52
S41	2	vomer near2 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 13:52
S42	1	("2004/0223635").URPN.	USPAT	OR	ON	2007/08/29 13:55
S43	8	S40 and enhance	USPAT	OR	ON	2007/08/29 14:00
S44	18746	ring near2 filter or disk near2 filter	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:01
S45	2445	S44 and enhance	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:01
S46	645	S45 and (extrat\$3 or extraction)	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:02
S47	0	S46 and (shadow near2 region)	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:02
S48	0	S46 and (tumor near2 shadow)	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:03
S49	230	S46 and tumor	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:10

## EAST Search History

S50	3	S49 and shadow	USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:04
S51	28	("20030185427"   "20030223533"   "20040008819"   "20040066911"   "20040073584"   "20040101087"   "20040101088"   "20040101089"   "20040101104"   "20040102688"   "20040136491"   "20040174946"   "4521901"   "4993055"   "5105456"   "5193105"   "5386445"   "5454022"   "6226352"   "6246742"   "6403965"   "6418192"   "6456692"   "6459754"   "6463118"   "6560315").PN. OR ("6973158"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:07
S52	142	("3980885"   "4259582"   "4323973"   "4437161"   "4453266"   "4463375"   "4503461"   "4545068"   "4618990"   "4663773"   "4723553"   "4736439"   "4747156"   "4751643"   "4769850"   "4792900").PN. OR ("4907156"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:32
S53	1008	382/260.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:44
S54	2	S53 and (tumor near2 shadow)	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:34
S55	0	("2003/0039385").URPN.	USPAT	OR	ON	2007/08/29 14:35
S56	16	("4618989").PN. OR ("4769850"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:38
S57	0	ring near2 filter near2 tumor near2 shadow	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:39
S58	0	disk near2 filter near2 tumor near2 shadow	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:39
S59	13363	disk near2 filter	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:39
S60	2	S59 and tumor near2 filter	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:40

## EAST Search History

S61	1	S59 and tumor near2 shadow	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:41
S62	0	("2004/0223634").URPN.	USPAT	OR	ON	2007/08/29 14:41
S63	0	("2004/0223634").URPN.	USPAT	OR	ON	2007/08/29 14:41
S64	5755	ring near2 filters	US-PGPUB; USPAT; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:41
S65	2	S64 and (tumor near2 shadow)	US-PGPUB; USPAT; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 14:42
S66	406	S53 and extract\$3	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:45
S67	132	S66 and enhance	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:45
S68	12	S67 and tumor	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 14:45
S69	13	("4745550"   "4907156"   "5133020"   "5224036"   "5463548"   "5550933"   "5579360"   "5720928"   "5732121"   "5734751"   "5740286"   "5768405").PN. OR ("6418238").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:07
S70	17	("4258264"   "4276473"   "4315318"   "4387428"   "4769850"   "4839807").PN. OR ("5224036"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:16
S71	16	("4618989").PN. OR ("4769850"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:18
S72	55	("3980885"   "4411270"   "4437161"   "4545068"   "4630202"   "4663773"   "4682291"   "4707786"   "4723553"   "4769850").PN. OR ("4839807"). URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:34
S73	2	09/943347.app.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:35



## EAST Search History

S74	9	("5732121"   "5761334"   "5768333"   "5784482"   "5799100"   "5832103"   "5984870"   "6272233"   "6631204").PN. OR ("7187789").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/08/29 16:36
S75	131	tumor near2 shadow	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:35
S76	72	S75 and extract\$3	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:35
S77	0	S76 and enhancement	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:36
S78	16	S76 and enhancement	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:36
S79	6579	diagnosis near2 apparatus	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:35
S80	13	S79 and (tumor near2 shadow)	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:35
S81	12	S80 and extract\$3	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:35

## EAST Search History

S82	0	S81 and enhacement	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:36
S83	6	S81 and enhancement	US-PGPUB; USPAT; USOCR; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 09:36
S84	1087	382/260.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:55
S85	4	S84 and (enhanc\$3 near3 images near3 suppress\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:37
S86	64	(enhanc\$3 near3 images near3 suppress\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:43
S87	383	circular near3 shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:48
S88	0	S87 and (enhanc\$3 near3 images near3 suppress\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:38
S89	0	S87 and(images near3 suppress\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:39

## EAST Search History

S90	55	S87 and suppress\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:39
S91	16	S90 and enhance	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:39
S92	0	S86 and (shadow near3 region)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 14:01
S93	3	S86 and shadow	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 13:44
S94	3	S86 and ((shadow or dark)near3 region)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:16
S95	9	("20020067862"   "20030048367"   "4030121"   "5038388"   "5479215"   "5880767"   "5940536"   "6987542"   "7050649").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/01/22 14:04
S96	414	(circular near3 shadow) or (circular near3 dark near3 region)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:18
S97	1	S96 and (enhanc\$3 near3 image near3 suppress\$3)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:20

## EAST Search History

S98	55	S96 and suppress\$3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:20
S99	5	S98 and (enhanc\$3 near3 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:22
S10 0	2772	382/128.ccls.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:23
S10 1	439	S100 and (enhanc\$3 near3 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:23
S10 2	53	S101 and (suppress\$3 near3 image)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/01/22 16:24